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EXAMINER

HOYE, MICHAEL W

ART UNIT PAPER NUMBER

2623

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/714,510	MIURA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael W. Hoye	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicants' response under 37 C.F.R. § 1.116, filed on April 28, 2006, in order to disqualify *Schaffer* as prior art with respect to pending claims 1-15 and 17-30, by submitting an English-language translation of the foreign priority document, JP Application No. 11-326576, to perfect the instant application's claim to priority and disqualify the *Schaffer* reference has been received and entered.

However, Applicants' previous arguments, filed on September 21, 2005, with respect to independent claims 1, 7, 8, 9, 10, 15 and 20, which state that, "none of the applied references teach or suggest any comprehension that the "information with regard to the program includes statistical data with regard to viewing of the program,"" have been re-considered but are moot in view of the new grounds of rejection, more specifically, in view of the Shah-Nazaroff et al (USPN 6,317,881) reference, previously cited by the Examiner, and as cited in the rejections below.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2623

3. Claims 1, 8-9, 25 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Billock et al (USPN 6,314,575), in view of Girard et al (USPPN 5,751,282), in further view of Shah-Nazaroff et al (USPN 6,317,881).

Regarding Claim 1, Billock shows a program transmitting/receiving system having a center device and at least one terminal device connected through a communication device to the center device (col. 3 lines 60-67, col. 4 lines 1-15, telecasting facility and viewing stations). The center device comprising a program information memory device for storing information with regard to a program (col. 4 lines 50-67, col. 5 lines 55-67, col. 6 lines 1-30, mass storage) generated on the basis of a schedule to broadcast a program (col. 6 lines 25-41, assigning time slots to requested data, col. 18 lines 1-13, providing viewer with program schedule), a program information transmitting device for transmitting the information with regard to the program to the terminal device through the communication device (col. 3 lines 3-34, col. 4 lines 5-15, central transmitting station), a broadcasting device for broadcasting the program to the terminal device through the communication device (col. 6 lines 13-51, sending video to viewer), in accordance with the schedule (col. 6 lines 25-41, assigning time slots to requested data, col. 18 lines 1-13, providing viewer with program schedule), and for storing the program (col. 4 lines 50-67, col. 5 lines 55-67, col. 6 lines 1-30, mass storage) therein at a transferable condition to the terminal device, and a request program transmitting device for receiving a request signal of the program transmitted by the terminal device, and for transmitting the program, corresponding to the request signal of the program and stored at the transferable condition, through the communication device to the terminal device at least transmitting the request signal of the program (col. 6 lines 13-51, receiving request from viewing station and providing video).

Art Unit: 2623

Furthermore, Billock shows the terminal device comprising a program information receiving device for receiving the information with regard to the program transmitted by the center device (col. 8 lines 15-67, col. 9 lines 1-67, viewing station), a program receiving device (col. 8 lines 15-67, col. 9 lines 1-67, viewing station), an image information generating device for generating an image information for a program selection of a user (col. 8 lines 15-35, graphics computer), a program request signal transmitting device for transmitting the request signal of the program selected by the user to the center device through the communication device (col. 10 lines 58-65, col. 13 lines 10-67, transmitting requests to central facility), and a request program receiving device for receiving the program corresponding to the request signal of the program (col. 8 lines 15-67, col. 9 lines 1-67, viewing station, col. 8 lines 15-35, graphics computer). Billock fails to show that the program selected could be a past program broadcast in accordance with the schedule information from the center device. Girard shows that the program selected could be a past program broadcast in accordance with the schedule information from the center device (col. 4 lines 8-23, col. 5 lines 45-67, col. 6 lines 1-7, 34-65, selecting and viewing past programs according to a schedule). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Billock with the ability to select past programs, as in Girard, so a user could view at their own convenience a program that they might have missed. The claimed displaying device for displaying the image information on a display is met by TV monitor 34 (Fig. 5) of the Billock et al reference. The claimed wherein the information with regard to the program includes statistical data with regard to viewing of the program, and the image information includes information on the basis of the statistical data, wherein the displaying device displays the image information in a two-dimensional way is not explicitly

Art Unit: 2623

disclosed by the Billock et al or Girard et al references. However, Shah-Nazaroff et al teaches in col. 5, line 9 – col. 6, line 22, that:

...In one embodiment, all broadcasts currently being aired, soon to be aired, currently available on pay per view or on demand, etc. are listed even if the viewer does not have access to all of the broadcasts... Then, in step 330 (see Fig. 3), each broadcast in the list can be ranked according to viewer characteristics and ratings. The ratings categories can be very detailed. For instance, a category could be limited to viewers who characteristically enjoy the same dramas and situation comedies as the potential viewer. The program with the highest rating in the category is ranked highest. Numerous additional viewer characteristics could also be used to identify which rating category to use. For instance, the rating categories could include viewers ages 45 to 55, viewers in metropolitan areas of Europe, viewers who play role-playing games on the Internet, etc. The possibilities for viewer characteristic categories are virtually limitless... Once all the broadcasts have been ranked, the ranked list of broadcasts can be provided in step 340. The first broadcast on the list is intended to be the most likely broadcast that is of interest to the viewer. Thus, the viewer does not have to sort through a vast array of programming choices...

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the combination of Billock and Girard with the additional teachings of Shah-Nazaroff for the advantage of allowing a user to see what programming might be more desirable or popular to watch.

Regarding Claim 8, Billock shows the terminal device comprising a program information receiving device for receiving the information with regard to the program transmitted by the center device (col. 8 lines 15-67, col. 9 lines 1-67, viewing station), a program receiving device (col. 8 lines 15-67, col. 9 lines 1-67, viewing station), an image information generating device for generating an image information for a program selection of a user (col. 8 lines 15-35, graphics computer), a program request signal transmitting device for transmitting the request

Art Unit: 2623

signal of the program selected by the user to the center device through the communication device (col. 10 lines 58-65, col. 13 lines 10-67, transmitting requests to central facility), and a request program receiving device for receiving the program corresponding to the request signal of the program (col. 8 lines 15-67, col. 9 lines 1-67, viewing station, col. 8 lines 15-35, graphics computer). Billock fails to show that the program selected could be a past program broadcast in accordance with the schedule information from the center device. Girard shows that the program selected could be a past program broadcast in accordance with the schedule information from the center device (col. 4 lines 8-23, col. 5 lines 45-67, col. 6 lines 1-7, 34-65, selecting and viewing past programs according to a schedule). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Billock with the ability to select past programs, as in Girard, so a user could view at their own convenience a program that they might have missed. The claimed displaying device for displaying the image information on a display is met by TV monitor 34 (Fig. 5) of the Billock et al reference. The claimed wherein the information with regard to the program includes statistical data with regard to viewing of the program, and the image information includes information on the basis of the statistical data, wherein the displaying device displays the image information in a two-dimensional way is not explicitly disclosed by the Billock et al or Girard et al references. However, Shah-Nazaroff et al teaches in col. 5, line 9 – col. 6, line 22, that:

...In one embodiment, all broadcasts currently being aired, soon to be aired, currently available on pay per view or on demand, etc. are listed even if the viewer does not have access to all of the broadcasts... Then, in step 330 (see Fig. 3), each broadcast in the list can be ranked according to viewer characteristics and ratings. The ratings categories can be very detailed. For instance, a category could be limited to viewers who characteristically enjoy the same dramas and situation comedies as the potential viewer.

Art Unit: 2623

The program with the highest rating in the category is ranked highest. Numerous additional viewer characteristics could also be used to identify which rating category to use. For instance, the rating categories could include viewers ages 45 to 55, viewers in metropolitan areas of Europe, viewers who play role-playing games on the Internet, etc. The possibilities for viewer characteristic categories are virtually limitless... Once all the broadcasts have been ranked, the ranked list of broadcasts can be provided in step 340. The first broadcast on the list is intended to be the most likely broadcast that is of interest to the viewer. Thus, the viewer does not have to sort through a vast array of programming choices...

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the combination of Billock and Girard with the additional teachings of Shah-Nazaroff for the advantage of allowing a user to see what programming might be more desirable or popular to watch.

Regarding Claim 9, the method claim has been discussed with regards to the system claim of Claim 1.

Regarding Claim 25, the claimed wherein the statistical data with regard to viewing of the program comprises at least one of a viewing rate for the program, a number of requests for the program, and a ranking of the popularity of the program compared to other programs is met by the Shah-Nazaroff reference, as previously described above in claim 1, which meets the claimed "ranking of the popularity of the program compared to other programs."

Regarding Claims 27-28, the claims have been discussed with regards to the rejection of Claim 25 respectively.



Art Unit: 2623

4. Claims 2, 3, 5, 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Billock et al, in view of Girard et al, in further view of Shah-Nazaroff et al, and in further view of Gordon et al (USPN 5,920,700).

Regarding Claim 2, Billock further shows that the information with regard to the program includes information indicating allowance or rejection of the program (col. 2 lines 44-50, col. 3 lines 22-34, col. 8 lines 1-10, permitting only subscribers to access programs), and the terminal device further comprises a viewing information transmitting device for transmitting viewing information with regard to the program received by the program receiving device through the communication device to the center device (col. 13 lines 34-67, transmitting viewing information to central location). Billock also shows a center device comprising a transmission allowance selecting device for receiving the viewing information and selecting allowance or rejection of transmitting the program (col. 2 lines 44-50, col. 3 lines 22-34, col. 8 lines 1-10, permitting only subscribers to access programs, col. 13 lines 38-46, determining if viewer is allowed to view programming). Furthermore, Billock shows that a viewer is rejected or allowed to view certain media programs and is rejected or allowed on each selection (col. 8 lines 1-10, col. 13 lines 34-67). This is equivalent to a selection updating device. Billock, Girard and Shah-Nazaroff fail to show erasing a program from memory based on the selection of allowance or rejection. Gordon shows the ability to erase programs that are not used, or when they have not been sent (col. 5 lines 40-65, col. 6 lines 1-40, resource and schedule manager that delete unused or overused programs from memory to free up space). This allows the system to free up additional memory space for other programs. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Billock, Girard and Shah-Nazaroff with the

Art Unit: 2623

ability to erase a program from memory, as shown in Gordon, so that if a person was rejected from viewing a certain program, that program would be freed from memory and another program could be put in its place.

Regarding Claim 3, Billock shows that the information with regard to the program includes viewing information, and the image information for the program selection of a user includes a display on the basis of the viewing information (col. 6 lines 59-67, col. 7 1-67, col. 9 lines 19-55, fig. 6 & 7).

Regarding Claim 5, Billock shows that the program request signal is transmitted through a communications device to the center device on the basis of information indicating allowance or rejection of transmitting the program, included in the information with regard to the program and transmitted by the center device (col. 2 lines 44-50, col. 3 lines 22-34, col. 6 lines 25-40, col. 7 lines 1-67, col. 8 lines 1-10, 35-55, col. 9 lines 20-55, col. 13 lines 34-67, col. 18 lines 1-25).

Regarding Claim 10, the method claim has been discussed with regards to the system claim of Claim 2.

Regarding Claim 11, the method claim has been discussed with regards to the system claim of Claim 3.

Regarding Claim 13, the method claim has been discussed with regards to the system claim of Claim 5.

5. Claims 4, 6, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Billock et al, in view of Girard et al, in further view of Shah-Nazaroff et al, in further view of Gordon et al, and in further view of Lerman et al (USPN 6,378,036).

Regarding Claim 4, Billock, Girard, Shah-Nazaroff and Gordon fail to show that the information includes request frequency. Billock, Girard, Shah-Nazaroff and Gordon further fail to show that the center equipment contains a calculating device for totaling the request frequency, a frequency updating device for updating the calculated request frequency, and a transmission allowance device that selects allowance or rejection on the basis of the request frequency. Lerman shows a VOD system that uses a queue to designate the allowance or rejection of the transmission of the program. When a user makes a request, a scheduling device calculates how many requests for a program have been made, and places the user request in a line. This allows the system to reject or allow the transmission of a program based on the request frequency (col. 2 lines 5-55, col. 3 lines 25-59, col. 4 lines 15-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Billock, Girard, Shah-Nazaroff and Gordon with the request frequency calculating and determining system of Lerman so that the system would be able to regulate the number of users viewing a certain program and control the amount of available bandwidth.

Regarding Claim 6, Billock fails to show that the center device updates the information with regard to the program on the basis of a fact that the program is broadcast by the center device. Lerman shows a system that updates a queue when a program is broadcasted to a user (col. 2 lines 5-55, col. 3 lines 25-59, col. 4 lines 15-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Billock, Girard, Shah-Nazaroff and Gordon with the request frequency calculating and determining system of Lerman so that the system would be kept up to date on what users have been sent video so that their request could be removed from the queue.

Regarding Claim 12, the method claim has been discussed with regards to the system claim of Claim 4.

Regarding Claim 14, the method claim has been discussed with regards to the system claim of Claim 6.

6. Claims 7 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Billock et al, in view of Shah-Nazaroff et al.

Regarding Claim 7, Billock shows a program transmitting/receiving system having a center device and at least one terminal device connected through a communication device to the center device (col. 3 lines 60-67, col. 4 lines 1-15, telecasting facility and viewing stations). The center device comprising a program information memory device for storing an information with regard to a program (col. 4 lines 50-67, col. 5 lines 55-67, col. 6 lines 1-30, mass storage) generated on the basis of a schedule to broadcast a program (col. 6 lines 25-41, assigning time slots to requested data, col. 18 lines 1-13, providing viewer with program schedule), a program information transmitting device for transmitting the information with regard to the program to the terminal device through the communication device (col. 3 lines 3-34, col. 4 lines 5-15, central transmitting station), a broadcasting device for broadcasting the program to the terminal device through the communication device (col. 6 lines 13-51, sending video to viewer), in accordance with the schedule (col. 6 lines 25-41, assigning time slots to requested data, col. 18 lines 1-13, providing viewer with program schedule), and for storing the program (col. 4 lines 50-67, col. 5 lines 55-67, col. 6 lines 1-30, mass storage) therein at a transferable condition to the terminal device, and a request program transmitting device for receiving a request signal of the

Art Unit: 2623

program transmitted by the terminal device, and for transmitting the program, corresponding to the request signal of the program and stored at the transferable condition, through the communication device to the terminal device at least transmitting the request signal of the program (col. 6 lines 13-51, receiving request from viewing station and providing video). The claimed wherein the information with regard to the program includes statistical data with regard to viewing of the program is not explicitly disclosed by the Billock et al reference. However, Shah-Nazaroff et al teaches in col. 5, line 9 – col. 6, line 22, that:

...In one embodiment, all broadcasts currently being aired, soon to be aired, currently available on pay per view or on demand, etc. are listed even if the viewer does not have access to all of the broadcasts... Then, in step 330 (see Fig. 3), each broadcast in the list can be ranked according to viewer characteristics and ratings. The ratings categories can be very detailed. For instance, a category could be limited to viewers who characteristically enjoy the same dramas and situation comedies as the potential viewer. The program with the highest rating in the category is ranked highest. Numerous additional viewer characteristics could also be used to identify which rating category to use. For instance, the rating categories could include viewers ages 45 to 55, viewers in metropolitan areas of Europe, viewers who play role-playing games on the Internet, etc. The possibilities for viewer characteristic categories are virtually limitless... Once all the broadcasts have been ranked, the ranked list of broadcasts can be provided in step 340. The first broadcast on the list is intended to be the most likely broadcast that is of interest to the viewer. Thus, the viewer does not have to sort through a vast array of programming choices...

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Billock with the additional teachings of Shah-Nazaroff for the advantage of allowing a user to see what programming might be more desirable or popular to watch.

Regarding Claim 26, the claimed wherein the statistical data with regard to viewing of the program comprises at least one of a viewing rate for the program, a number of requests for the program, and a ranking of the popularity of the program compared to other programs is met by the Shah-Nazaroff reference, as previously described above in claim 7, which meets the claimed “ranking of the popularity of the program compared to other programs.”

7. Claims 15-24 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard et al, in view of Shah-Nazaroff et al.

Regarding Claim 15, Girard shows a center station comprising a center control circuit and a memory (col. 3 lines 1-10, centralized head end server), and a plurality of terminal stations connected to the center station via a communication network (col. 3 lines 1-22, set top boxes connected by network), wherein a first terminal station comprises a terminal control circuit (col. 3 lines 8-10, controlling which programs are displayed), wherein the center control circuit broadcasts a program, in accordance with a broadcast schedule (col. 3 lines 30-54, EPG, col. 4 lines 48-65, col. 6 lines 13-22, continuous media server providing programs), to the plurality of terminal stations via the communication network (col. 3 lines 1-22, set top boxes connected by network) and stores the program in the memory (col. 4 lines 48-65, storing programs), wherein, if a user of the first terminal station selects the program after the center control circuit broadcasts the program, the first terminal control circuit sends a program request signal to the center station (col. 6 lines 45-67, col. 7 lines 1-5, user requesting past video program), and wherein the center control circuit reads the program from the memory in response to the program request signal and re-transmits the program to at least the first terminal (col. 6 lines 45-67, col. 7 lines 1-5, head-

Art Unit: 2623

end sending program in response to request). Girard shows transmitting an electronic program guide, which contains at least part of the broadcast schedule (col. 3 lines 30-54, EPG) and which identifies the program based on at least a broadcast time of the program (col. 3 lines 44-54, displaying broadcast time), to the first terminal station wherein the first terminal control circuit displays the electronic program guide in a two-dimensional way (col. 3 lines 23-31, displaying on television), and wherein the electronic program guide indicates whether or not the program has already been broadcast (col. 4 lines 8-23, displaying past programs). The claimed wherein the electronic program guide includes statistical data with regard to viewing of the program is not explicitly disclosed by the Girard et al reference. However, Shah-Nazaroff et al teaches in col. 5, line 9 – col. 6, line 22, that:

...In one embodiment, all broadcasts currently being aired, soon to be aired, currently available on pay per view or on demand, etc. are listed even if the viewer does not have access to all of the broadcasts... Then, in step 330 (see Fig. 3), each broadcast in the list can be ranked according to viewer characteristics and ratings. The ratings categories can be very detailed. For instance, a category could be limited to viewers who characteristically enjoy the same dramas and situation comedies as the potential viewer. The program with the highest rating in the category is ranked highest. Numerous additional viewer characteristics could also be used to identify which rating category to use. For instance, the rating categories could include viewers ages 45 to 55, viewers in metropolitan areas of Europe, viewers who play role-playing games on the Internet, etc. The possibilities for viewer characteristic categories are virtually limitless... Once all the broadcasts have been ranked, the ranked list of broadcasts can be provided in step 340. The first broadcast on the list is intended to be the most likely broadcast that is of interest to the viewer. Thus, the viewer does not have to sort through a vast array of programming choices...

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Girard with the additional teachings of Shah-Nazaroff for the

Art Unit: 2623

advantage of allowing a user to see what programming might be more desirable or popular to watch.

Regarding Claim 17, Girard shows request a past program, or a program that has already been broadcast (col. 6 lines 45-65, selecting past program).

Regarding Claim 18, Girard shows a guide indicates that the program has already been broadcast and the user selects the program, the first terminal control circuit sends the program request signal to the center station (col. 6 lines 45-67, col. 7 lines 1-5, user requesting past video program), and wherein, when the electronic program guide indicates that the program has not been broadcast and the user selects the program, the first terminal control circuit does not send the program request signal to the center station (col. 5 lines 60-65, col. 6 lines 14-45, automatically tuning currently broadcasting data streams).

Regarding Claim 19, Girard shows that when a currently broadcast program is selected, the STB merely tunes to the correct data stream, as is conventionally done in the art (col. 5 lines 60-65, col. 6 lines 14-45, automatically tuning currently broadcasting data streams).

Regarding Claim 20, Girard shows a terminal station comprising a display (col. 3 lines 5-10, television display), and a control circuit (col. 3 lines 8-10, controlling which programs are displayed), wherein the control circuit receives an electronic program guide that identifies past programs that have been broadcast from a center station in the past (col. 4 lines 8-23, displaying past programs), identifies current programs that are currently being broadcast from the center station (col. 6 lines 34-45, current programs), and identifies future programs that will be broadcast from the center station in the future (col. 7 lines 25-40, future programs), wherein the control circuit displays the electronic program guide on the display in a two-dimensional way



Art Unit: 2623

(col. 3 lines 24-30, displaying EPG), wherein, when a user selects a selected past program from one of the past programs identified in the electronic program guide, the control circuit outputs a request signal to the center station requesting the center station to re-transmit the selected past program to the terminal station (col. 6 lines 45-67, col. 7 lines 1-5, head-end sending program in response to request). The claimed wherein the electronic program guide also indicates statistical data with regard to viewing of the program is not explicitly disclosed by the Girard et al reference. However, Shah-Nazaroff et al teaches in col. 5, line 9 – col. 6, line 22, that:

...In one embodiment, all broadcasts currently being aired, soon to be aired, currently available on pay per view or on demand, etc. are listed even if the viewer does not have access to all of the broadcasts... Then, in step 330 (see Fig. 3), each broadcast in the list can be ranked according to viewer characteristics and ratings. The ratings categories can be very detailed. For instance, a category could be limited to viewers who characteristically enjoy the same dramas and situation comedies as the potential viewer. The program with the highest rating in the category is ranked highest. Numerous additional viewer characteristics could also be used to identify which rating category to use. For instance, the rating categories could include viewers ages 45 to 55, viewers in metropolitan areas of Europe, viewers who play role-playing games on the Internet, etc. The possibilities for viewer characteristic categories are virtually limitless... Once all the broadcasts have been ranked, the ranked list of broadcasts can be provided in step 340. The first broadcast on the list is intended to be the most likely broadcast that is of interest to the viewer. Thus, the viewer does not have to sort through a vast array of programming choices...

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Girard with the additional teachings of Shah-Nazaroff for the advantage of allowing a user to see what programming might be more desirable or popular to watch.

Regarding Claim 21, the limitations of the claim have been discussed with regards to Claim 18.

Regarding Claim 22, the limitations of the claim have been discussed with regards to Claim 19.

Regarding Claim 23, Girard shows a number of program streams (col. 4 lines 48-67, col. 5 lines 1-32) that can be accessed during different time by different terminals. Furthermore, Girard shows that when a person tunes a currently broadcasted program, this is done in the conventional way of tuning a channel (col. 5 lines 60-65, col. 6 lines 14-45, automatically tuning currently broadcasting data streams). Finally, since the head-end must establish and send another stream of data to send a past program to a specific individual (col. 6 lines 45-67, col. 7 lines 1-5, sending past program stream), this stream is different than the stream broadcasting current programs. Girard fails to specifically state that this extra stream is broadcasted on a different channel. Furthermore, Girard is silent as to the channel allocation or frequency allocation. Official Notice is given that it is well known and expected in the art to use one frequency channel to broadcast a single program. Therefore, it would have been obvious to one of ordinary skill in the art to modify Girard to use only one program per frequency channel so there was no need for complex digital channel allocation or channel mapping. This would greatly simplify the system and reduce overall cost.

Regarding Claim 24, the limitations of the claim have been discussed with regards to Claim 23.

Regarding Claim 29, the claimed wherein the statistical data with regard to viewing of the program comprises at least one of a viewing rate for the program, a number of requests for

Art Unit: 2623

the program, and a ranking of the popularity of the program compared to other programs is met by the Shah-Nazaroff reference, as previously described above in claim 15, which meets the claimed “ranking of the popularity of the program compared to other programs.”

Regarding Claim 30, the limitations of the claim have been discussed with regards to Claim 29 respectively.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is **571-272-7346**. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

**Any response to this action should be mailed to:**

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2623

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Michael W. Hoyer  
May 17, 2006



**JOHN MILLER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**